

a heating element projecting into a combustion chamber of the internal combustion engine;

a current feed-through via which a heating current for the heating element is fed through an opening in the combustion chamber; and

a switch positioned in the region of the current feed-through, wherein the heating current is adapted to be controlled by opening and closing the switch.

11. (New) The sheathed-element glow plug as recited in Claim 10, wherein a control circuit for the switch is positioned in the region of the current feed-through, and wherein the control circuit produces a signal for opening and closing the switch.

12. (New) The sheathed-element glow plug as recited in Claim 11, further comprising a first feed line adapted to be connected to a terminal for a supply voltage for the heating current, and a second feed line connected to the control circuit for transmitting a control signal to the control circuit.

13. (New) The control circuit as recited in Claim 11, further comprising an input for a line, wherein the input is connected to the switch and the control circuit, and wherein an operating voltage and a control signal for the control circuit are adapted to be simultaneously applied via the input.

14. (New) The sheathed-element glow plug as recited in Claim 11, wherein the control circuit includes a means for determining the temperature of the heating element, and wherein the heating current is controlled as a function of a signal from said means.

15. (New) The sheathed-element glow plug as recited in Claim 10, wherein the heating element is one of a metallic and ceramic glow element.

16. (New) The sheathed-element glow plug as recited in Claim 15, wherein the glow element is adapted to be fastened in the opening of the combustion chamber by use of a housing, and wherein the housing is also adapted to house the switch and the control unit.

17. (New) The sheathed-element glow plug as recited in Claim 16, wherein the switch and the control circuit are integrated on one chip.